

L 06545..67

ACC NR: AT6021513

O

which make it possible to calculate changes in the wind speed and direction if the temperature over the body of water is known. The height of the interior boundary layer δ is assumed to be constant since distances measured in tens of kilometers from the shore are considered. Formulas are derived for calculating the wind field over the body of water, which is determined by the wind velocity at the height δ , the turbulent exchange conditions over the water surface, and the horizontal temperature gradient in the interior boundary layer caused by the difference between water and land temperatures. The results obtained here can be considered as a first approximation to solving the problem. However, even this first approximation showed that when temperature differences are sufficiently large ($\Delta T = 20^\circ$), the wind speed at heights of 2--10 m above the body of water may exceed the speed of the geostrophic wind. Orig. art. has: 1 figure and 32 formulas.

[EO]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 002/

Card 2/2 MFE

L 06515..67 EWT(1) GW
ACC.NR. AT6021513

SOURCE CODE: UR/2531/66/000/187/0139/0145

AUTHOR: Zaytsev, A. S.

24
B+1

ORG: none

TITLE: Effect of temperature inhomogeneity on the wind field in the boundary layer

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 187, 1966. Fizika pogranichnogo sloya atmosfery (Physics of the atmospheric boundary layer), 139-145

TOPIC TAGS: micrometeorology, wind field, atmospheric boundary layer, ~~temperature gradient~~, wind speed, wind direction, wind profile, near water layer, ATMOSPHERIC TEMPERATURE GRADIENT, WIND VELOCITY, WATER SURFACE

ABSTRACT: A solution is presented for solving the problem of changes in the wind speed and direction in the surface boundary layer of the atmosphere in which there is a horizontal temperature gradient caused by the presence of a body of water. In this case, changes in temperature over the water are assumed to be known from solving the problem of transformation of air temperatures. It is also assumed that the distance from the shore is on the order of 10^4 km. Formulas are derived

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L 15009-66

ACC NR: AP6001640

frequencies for the limb of the Rayleigh line and for the Raman scattering line at 261 cm^{-1} for chloroform agree within the limit of experimental error from 25 to 80 cm^{-1} . A divergence is observed between these curves in the short range region below 25 cm^{-1} . The contour for the limb of the Rayleigh line in this spectral region shows more of a slope than that for the Raman scattering line. The same type of relationship is observed between these curves for the depolarized 761 cm^{-1} line of chloroform and on the 313 cm^{-1} line in carbon tetrachloride. The intensity of the Raman scattering line at 217 cm^{-1} in toluene falls faster far from the maximum of the line than does the intensity of the limb of the Rayleigh line in this region. In the short range region, the contour of the Raman scattering line falls more slowly than the contour of the corresponding Rayleigh line. The contour of the 1178 cm^{-1} Raman scattering line in benzene coincides with that of the limb of the Rayleigh line in a comparatively wide spectral interval. Divergence between these two curves takes place only in the extremely long range section. The intensity of the Raman scattering line at 606 cm^{-1} falls considerably faster than that of the Rayleigh line in benzene. A theoretical explanation is given for the results. In conclusion the authors are grateful to I. I. Fabelinskii for guidance in the work and to I. I. Sobel'man for valuable discussion of problems encountered in this work. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 21Jul64/ ORIG REF: 009/ OTH REF: 001

Card 2/2 60

L 15009-66 EWT(l)/EWT(m)/EWP(j) IJP(c) W/W/GG/RM

ACC NR: AP6001640

SOURCE CODE: UR/0051/65/019/006/0893/0896

46

AUTHOR: Zaytsev, G. I.; Starunov, V. S.

15
2

ORG: none

21, 44, 55

TITLE: Width and shape of depolarized lines of Raman light scattering and of the limb of the Rayleigh line in liquids

SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 893-896

TOPIC TAGS: Raman scattering, Raman spectrum, benzene, chloroform, carbon tetrachloride, toluene, spectrum analysis, LINE SPECTRUM

ABSTRACT: The authors study the distribution of intensities with respect to frequency in the spectrum for the limb of the Rayleigh line and compare the resultant data with intensity distribution in the spectrum of depolarized lines for Raman light scattering in liquids in the widest possible frequency interval. The Raman spectra of the following lines were studied: benzene 606 and 1178 cm^{-1} , carbon tetrachloride 313 cm^{-1} , chloroform 261 and 761 cm^{-1} and toluene 217 cm^{-1} . The experimental equipment is described. The intensity distribution with respect to

ZAYTSEV, G.A.; STEPANOVA, S.V.; KHOTKEVICH, V.I.

Magnetoresistance and static skin-effect in cadmium single
crystals. Zhur. eksp. i teor. fiz. 48 no.2:760-761 F '65.
(MIRA 18:11)

1. Khar'kovskiy gosudarstvennyy universitet i Fiziko-tehnicheskiy
institut AN UkrSSR.

ZAYTSEV, B.Ye.; AKIMOV, V.K.; BUSEV, A.I.; GUSEV, S.I.

Structure of pyridon complexes with metals. Zhur. ob. khim. 35
(MIRA 19:1)
no.12:2119-2123 D '65.

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov
i krasiteley i Moskovskiy gosudarstvennyy universitet Im. Lomonosova. Submitted November 16, 1964.

ZAYTSEV, A.S.

Perforation penetration in metamorphic schists. Izv. vys.
ucheb. zav.; geol. i razv. 8 no. 12:134-137 D '65
(MIRA 19:1)

1. Moskovskiy giprotektchnyy institut imeni V.V. Kuybysheva.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.S.; SEROVA, N.V.

Some results of meteorological observations on the Valday
Lake using a specially equipped boat. Trudy GGO no.150:107-
115 '64. (MTRA 17:7)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

MELKOVA, Ye.P., kand.geol.-mineral.nauk; ZAYTSEV, A.S., inzh.

Prospecting for ground water. Transp. stroi. 13 no.7:30-32 J1 '63.
(Water, Underground)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.S.

Transformation of a wind field with a change in turbulent exchange.
Trudy GGO no.95:42-46 '63. (MIRA 16:7)
(Winds)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.S.

Pulsation of the vertical component of the wind velocity
based on pilot balloon data. Trudy GG0 no.144:85-87 '63.
(MIRA 17:6)

ACCESSION NR: AT4028746

i.e., the layers of pulsation maximum correspond to the minimum with the Richardson number, but this relation may be substantially disrupted due to the energy diffusion of the turbulence above and below the layers. Thus, these observations have resulted in some data on the change of turbulence in the boundary layer of the atmosphere. Orig. art. has: 3 figures.

ASSOCIATION: Leningradskaya glavna geofizicheskaya observatoriya (Principle Geophysical Observatory of Leningrad)

SUBMITTED: 00

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: AS

NO REF Sov: 000

OTHER: 000

Card 2/2

ACCESSION NR: AT4028746

8/2531/63/000/144/0085/0087

AUTHOR: Zaytsev, A. S.

TITLE: Pilot balloon data on pulsations of the vertical components of the wind velocity

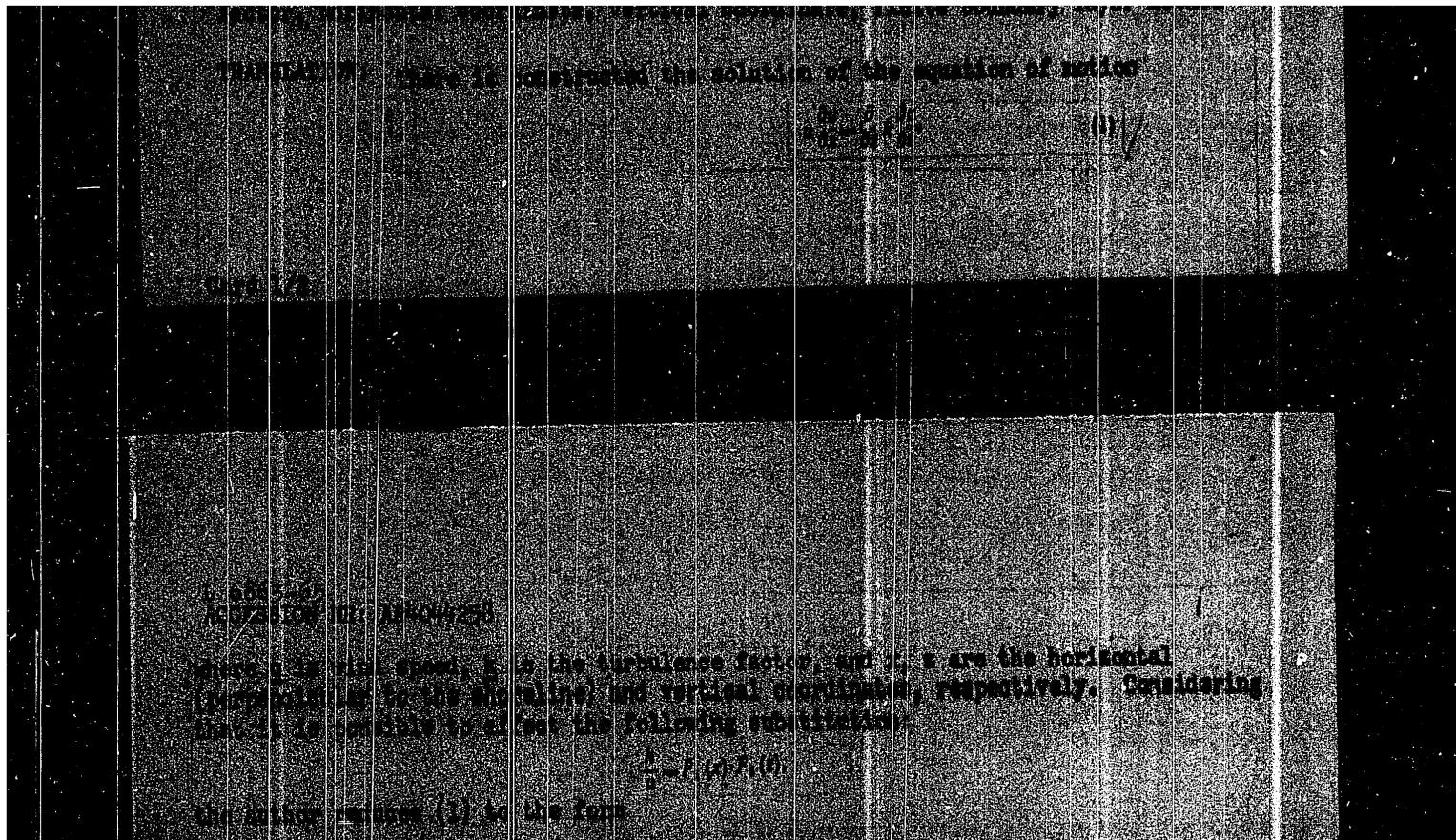
SOURCE: Leningrad. Gl. geofiz. observ. i Ukr. n.-i. gidrometeorol. inst. Trudy*, no. 144/40, 1963. Fizika pogranichnogo sloya atmosfery* (physics of the atmospheric boundary layer); Dneprovskaya expiditsiya GGO i UkrNIGMI, 85-87

TOPIC TAGS: pilot balloon, wind velocity, Dnieper expedition, turbulence

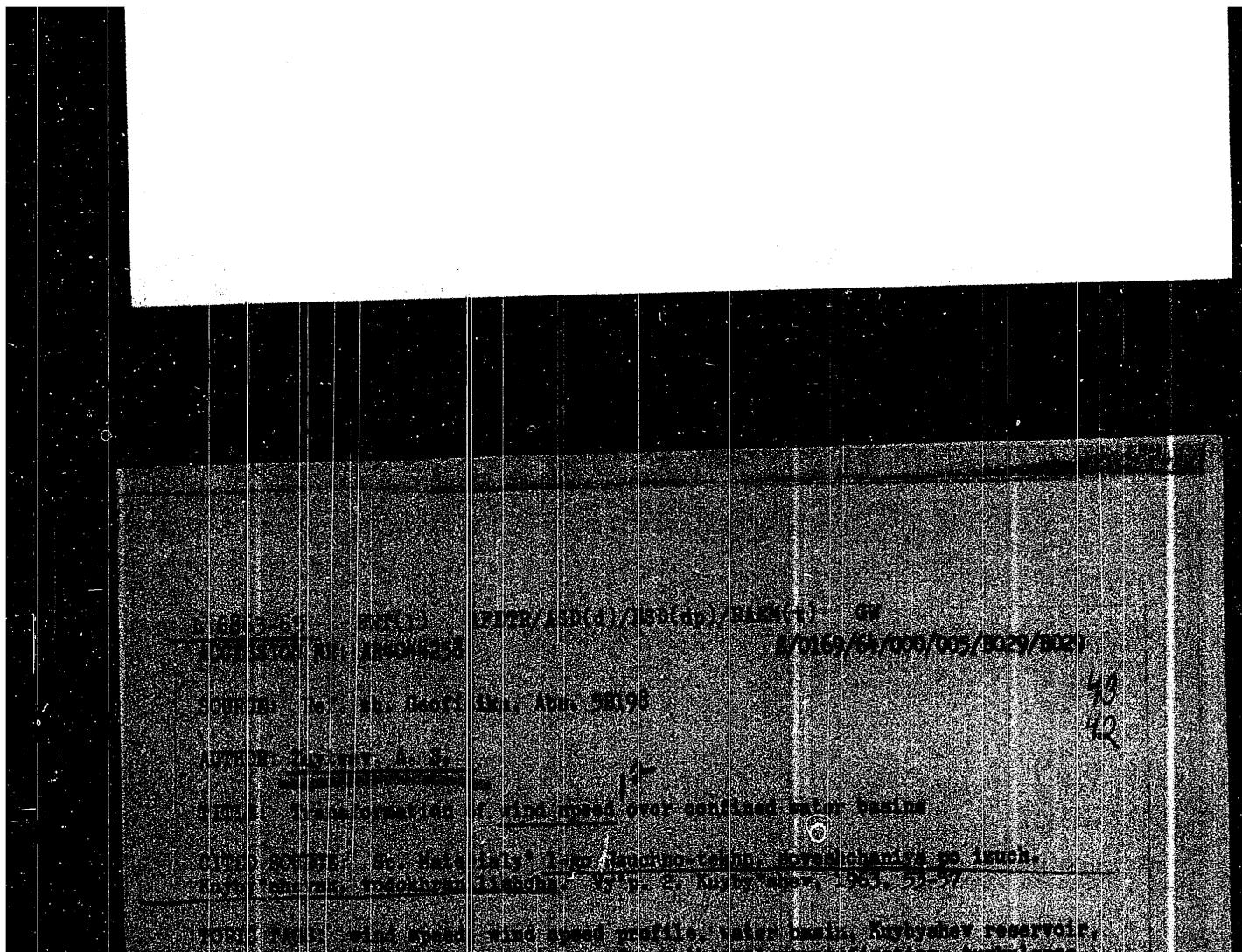
ABSTRACT: An attempt is made to evaluate the properties of the vertical profile of turbulence on the basis of pilot balloon observations. A method of determining the pulsations of the vertical component of the wind velocity according to the observations is presented. The results of calculating the mean quadratic pulsations according to the observations of the Dnieper expedition (GGO) are also presented. The vertical velocity of the pilot balloon for the layers was calculated at definite times according to the altitude. The averaged velocity according to the pilot balloon's altitude was calculated and the pulsations were determined in standard levels. The results are presented in graphs; it was found that the vertical profile of pulsations in this case agrees with the profile with the Richardson number;

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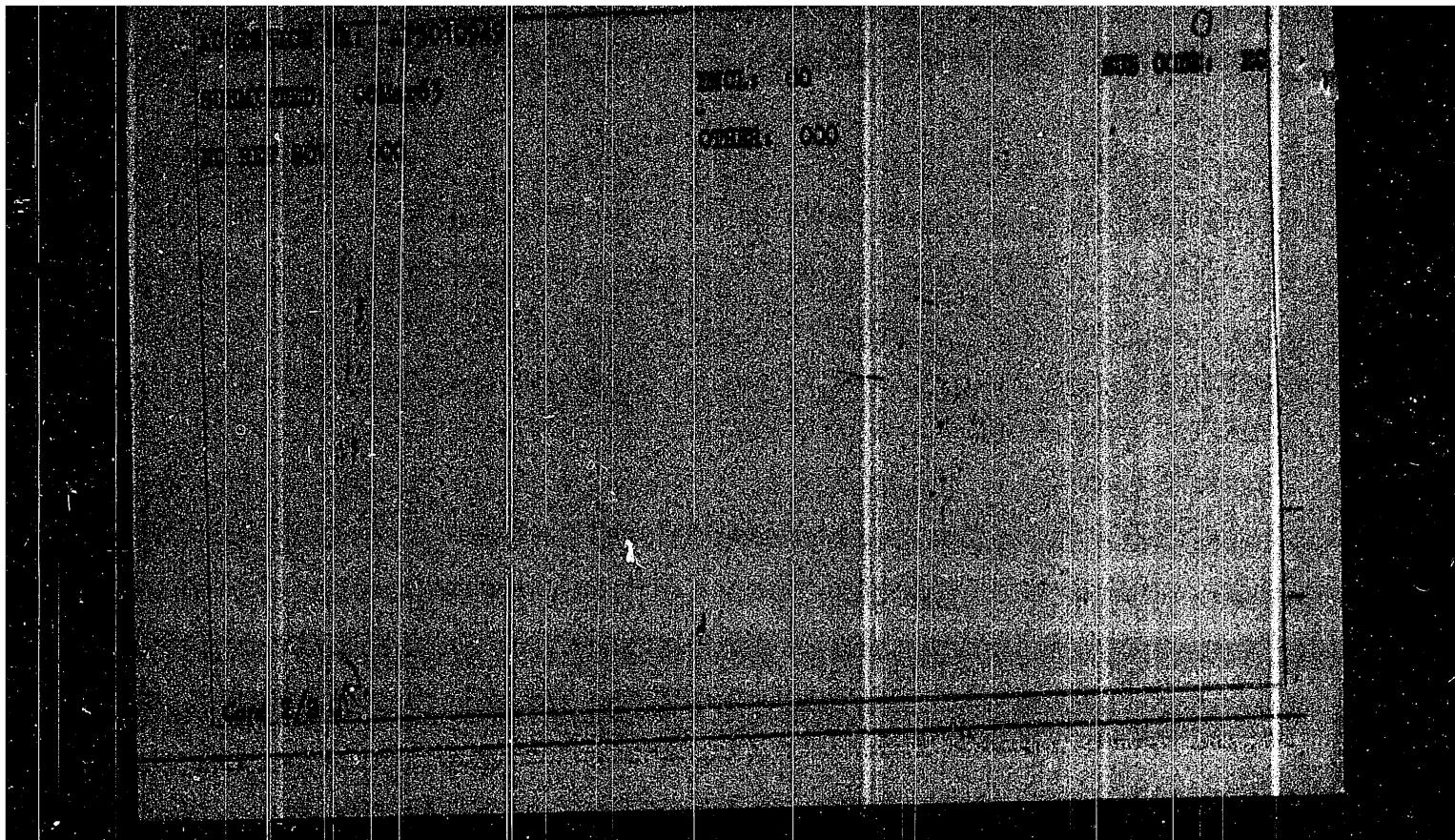


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1993-1994-1995-1996-1997

Figure 1. A photograph of the same field of view at two different times. The left panel shows the field as it appeared in 1980, and the right panel shows the same field in 1989.

19. *Leucosia* *leucostoma* *leucostoma* *leucostoma* *leucostoma*

10. The following table shows the number of hours worked by each employee.

the first time in the history of the world, the people of the United States have been compelled to make a choice between two political parties.

10. The following table shows the number of hours worked by 1000 workers in a certain industry.

10. The following table shows the number of hours worked by 1000 workers in a certain industry.

10. The following table shows the number of hours worked by each employee in a company.

1000 1000 1000 1000 1000 1000 1000 1000 1000 1000

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2) *Leucosia* sp. (Diptera: Syrphidae) was collected from the same area as the *Leucosia* sp. (Diptera: Sarcophagidae).

19. *Leucosia* *leucostoma* (Fabricius) *leucostoma*

10. The following table shows the number of hours worked by each employee in a company.

19. *Leucosia* *leucostoma* *leucostoma* *leucostoma* *leucostoma*

1000 1000 1000 1000 1000 1000 1000 1000 1000 1000

1000 1000 1000 1000 1000 1000 1000 1000

10. The following table shows the number of hours worked by each employee.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A., kand. istoricheskikh nauk

Aleksei Khlobystov attacks. Kryl. rod. 15 no.10:7 0 '64
(MIRA 18t1)

IZRAITEL', S.A., otv. red.; SKURAT, V.K., otv. red.; ZUBAREV, S.N., otv. red.; MOISEYEV, S.L., otv. red.; ASTAF'YEVA, A.V., kand. tekhn. nauk, red.; VAS'KOVSKIY, Ye.L., red.; VLISHNEVSKIY, Ye.L., red.; KRIVTSOV, B.S., red.; KOROTKIN, I.N., red.; MITROFANOV, S.I., doktor tekhn. nauk, red.; NORIKIN, V.V., kand. tekhn. nauk, red.; NIKITIN, A.A., red.; RUDNEV, A.P., red.; SLASTUNOV, V.G., red.; TKACHEV, F.A., red.; RAUKHVARGER, Ye.L., kand. tekhn. nauk, red.; FEOKTISTOV, A.T. [deceased], red.; ZAYTSEV, A.P., red.

[Safety regulations for the dressing and sintering of ferrous and nonferrous metal ores] Pravila bezopasnosti pri obogashchenii i aglomeratsii rud tsvetnykh i chernykh metallov. Moskva, Nedra, 1964. 106 p. (MIRA 18:4)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennyy komitet po nadzoru za bezopasnym vedeniyem v promyshlennosti i gornomu nadzoru.

L 47097-66 EWT(1)

ACC NR: AR6016014 SOURCE CODE: UR/0271/66/000/001/A010/A010

AUTHOR: Zaytsev, A. P. --Zaytsev, A. I.

ORG: none

TITLE: Time relays using devices with thyratron properties

SOURCE: Ref. zh. Avtomat. telemekh. i vychisl. tekhn., Abs. 1A64

REF SOURCE: Mezhyuz. sb. tr. Zap.-Sib. sovet po koordinatsii i planir. nauchno-issled. rabot po tekhn. i yestestv. naukam, vyp. 4, 1965, 163-166

TOPIC TAGS: time relay, rc circuit, thyratron, silicon diode, voltage, pulsed voltage

ABSTRACT: Time relays, whose voltages transmitted to the R-C circuit are of pulse nature, are investigated. The use of pulsed voltage causes increased "specific" delay of the circuit (delay per unit of capacitance) as compared to cases where voltage is continuous. A formula is derived for determining the delay time of relays with rectangular power supply voltage. Two diagrams of such time relays are presented. One uses a thyratron and the other a controlled silicon diode. The original article has 3 illustrations, and a bibliography of 2 titles. [DW]

SUB CODE: 09/

Card 1/1

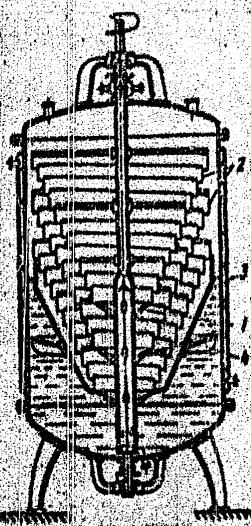
ns

UDC: 621.318.563.5

37
B

L 3952-66

ACC NII: AP6009819



1--actuating cylinder; 2--control valve;
3--feedback lever; 4--master screw; 5--
step-servo motor; 6--thickness gauge; 7--
hydraulic pressure device; 8--step-servo
motor; 9--control circuit for the step-servo
motor; 100--regulator; a--generators; b--
phase-sensitive power amplifier; c--unit for
selecting the zone of insensitivity; d--
code-to-voltage converter; e--divider;
f--master unit

consists of an actuating cylinder for set-
ting the roller span, a control valve with
lever-controlled motion feedback and a master
screw which is moved by the step-servo motor to control the roller span.

SUB CODE: 13/ SUBM DATE: 24Feb64/ ORIG REF: 000/ OTH REF: 000

Card 2/21

L 23952-66 EWT(d)/EWT(m)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l) DJ
ACC NIB: AF6009819 SOURCE CODE: UR/0413/66/000/004/0008/0009
AUTHOR: Mum'os, M. V.; Filatov, A. S.; Romanchikov, B. F.; Zaytsev, A. P.;
Privedentsev, V. P.

ORG: none

TITLE: An electrohydraulic system for automatically controlling strip thickness on cold rolling mills. Class 7, No 178773

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 8-9

TOPIC TAGS: industrial automation, hydraulic equipment, cold rolling

ABSTRACT: This Author's Certificate introduces: 1. An electrohydraulic system for automatically controlling strip thickness on cold rolling mills. The device is operated by signals from a thickness meter. The quality of thickness control is improved by using a discrete system for automatic control of a hydraulic pressure device. This control system consists of a step-servo power motor, a circuit for controlling this motor and a regulator which has a zone of insensitivity with boundaries which are automatically changed by an amount equal to the motion of the pressure device and by a time interval equal to the transportation and measurement delay of the system. 2. A modification of this electrohydraulic system in which the speed is increased and the need for using roller position indicators is eliminated. The hydraulic pressure device

UDC: 621.771.237.016-523.3

Card 1/2

ZAYTSEV, A.P.

Content of the safety engineering course in mining colleges. Bezop. truda
v prom, 6 no.8:9-10 Ag '62. (MIRA 16:4)

1. Chlen Gosudarstvennogo komiteta pri Sovete Ministrov RSFSR pⁿnadzoru
za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Mining engineering—Study and teaching)

IZRAITEL', S.A., otv. red.; MOISEYEV, S.L., otv. red.; SKURAT, V.K.,
otv. red.; SLASTUNOV, V.G., otv. red.; ZAYTSEV, A.P., red.;
POLESIN, Ya.L., red.; SKURAT, V.K., red.; SLASTUNOV, V.G., red.;
SOBOLEV, G.G., red.; FEOKTISTOV, A.T., red.; MIROSHNICHENKO,
V.D., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Unified safety rules for mining metalliferous, non-metallic, and
placer deposits by the underground method] Edinye pravila bez-
opasnosti pri razrabotke rudnykh, nerudnykh i rossypnykh mest-
rozhdenii podzemnym sposobom. Moskva, Gosgortekhizdat, 1962. 253 p.
(MIRA 15:12)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennyy komitet po nadzoru za
bezopasnym vedeniem rabot v promyshlennosti i gornomu nadzoru.
(Mine safety)

BOBROV, Ivan Vladimirovich; ZAYTSEV, A.P., retsenzent; CHERNOV, O.I.,
retsenzent; KARPOV, A.M., otv. red.; RATNIKOVA, A.P., red.
izd-va; BOLDYREVA, Z.A., tekhn. red.; PROZOROVSKAYA, V.L.,
tekhn. red.

[Safe methods of carrying out development workings in seams
subject to sudden outbursts of coal and gas] Sposoby bezo-
pasnogo provedeniia podgotovitel'nykh vyrobok na plastakh,
opasnykh po vnezapnym vybrosem uglia i gaza. Moskva, Gos.
nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 257 p.
(MIRA 15:2)

(Donets Basin--Mine gases)

KUTUKOV, A.I., red.; ZAYTSEV, A.P., red.; DROGALIN, G.V., red.; POLESIN, Ya.L., red.; KOSTYUKOV, N.N., red.; KURAS, D.M., red.; LUZHNIKOV, A.M., red.; RODIONOV, I.S., red.; BLOKH, S.S., red.; SULTANOV, D.K., red.; BIBILUROV, V.P., red.; PETROV, A.I., red.; KHARCHEVNIKOV, N.M., red.; ANDRIANOV, K.I., red.; GADZHINSKAYA, M., red.izd-va; BERESLAVSKAYA, L.Sh., tekhn.red.

[Safety regulations for petroleum and gas producing industries]
Pravila bezopasnosti v neftegazodobyvaiushchei promyshlennosti.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960.
(MIRA 14:3)
123 p.

1. Russia (1917- R.S.F.S.R.) Gosudarstvenny komitet po nadzoru za bezopasnym vedeniem rabot v promyshlennosti i gornomu nadzoru.
 2. Tsentral'nyy apparat Gosgortekhnadzora RSFSR (for Kutukov, Zaytsev, Drogelin, Polesin, Kostyukov, Kuras, Luzhnikov, Rodionov, Blokh).
 3. Vsesoyuznyy nauchno-issledovatel'skiy institut po tekhnike bezopasnosti (for Sultanov).
 4. Upravleniya ukrugov Gosgortekhnadzora RSFSR (for Bibilurov, Petrov, Kharchevnikov).
 5. Tsentral'nyy komitet profsoyuza rabochikh neftyanoy i khimicheskoy promyshlennosti (for Andrianov).
- (Oil fields--Safety measures)
(Gas industry--Safety measures)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.P., inzhener-podpolkovnik; MATVEYEV, R.I., kapitan tekhnicheskoy
sluzhby, voyennyy tekhnik pervogo klassa

They made it themselves. Vest.Vozd.Fl. no.8:34 Ag '61.

(Bombsights)

(MIRA 14:8)

ZAYTSEV, A.P., Inzhener-polkovnik

Pay attention daily to regulating operations. Vest.
protivovozd. obor. no. 7316-18 JI '61. (MIRA 14:8)
(Antiaircraft artillery-Maintenance and repair)

YASNITSKIY, B.G.; ZAYTSEV, A.P.

Mechanism of photochemical chlorination of chloroacetaldehyde.
Dokl. AN SSSR 152 no.1:168-170 S '63. (MIRA 16:9)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut. Predstavлено академиком N.N.Semenovym.
(Acetaldehyde) (Chlorination) (Photochemistry)

YASNITSKIY, B.G.; ZAYTSEV, A.P.

Determination of trichloroacetic and nitric acids present together, Med. promyshl. SSSR 17 no.8:39-41 Ag'63 (MIRA 17:2)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsev-ticheskiy institut.

YASNITSKIY, B.G.; ZAYTSEV, A.P.

Resistance of graphite materials to solutions of monochloracetic aldehyde. Med.prom. 13 no.1:49-51 Ja '59. (MIRA 12:10)

1. Khar'kovskiy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut.

(GRAPHITE) (ALDEHYDMS)

ACCESSION NR: AP4025742

for d-c motor pulse-type speed regulation systems. The divider was reported on in "Byulleten' izobreteniy," no. 21, 1962; Author's Certificate no. 151514. Orig. art. has: 4 figures and 7 formulas.

ASSOCIATION: none

SUBMITTED: 09Mar63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 000

ACCESSION NR: AF4025742

S/0144/64/000/002/0239/0242

AUTHOR: Zaytsev, Aleksandr Ivanovich (Candidate of technical sciences,
Docent, Head of chair); Zaytsev, Aleksandr Petrovich (Aspirant)

TITLE: New schemes of variable-ratio frequency divider

SOURCE: IVUZ. Elektromekhanika, no. 2, 1964, 239-242

TOPIC TAGS: frequency divider, thyratron frequency divider, variable ratio
frequency divider, three phase frequency divider, frequency division

ABSTRACT: A method of frequency division in which the division ratio depends
on a controlling d-c voltage is considered; a storage capacitor "counts" a certain
number of incoming pulses and by discharging through a thyratron creates lower-
frequency outgoing pulses. Descriptions of the principal single-phase and 3-phase
circuits and oscillograms of laboratory tests are presented. The application of
the variable-ratio divider is indicated for shaping and counting schemes as well as

MUSTEL', Pavel Ivanovich; DYATLOV, V.I., inzh., retsenzent; YERMAKOV, P.I., inzh., retsenzent; ZAYTSEV, A.P., otv. red.

[Principles of safety engineering and fire fighting technology in prospecting] Osnovy tekhniki bezopasnosti i protivopozharnoi tekhniki pri geologorazvedochnykh rabotakh. Moskva, Nedra, 1964. 189 p. (MIRA 17:11)

ZAYTSLV, A.P., inzh.

Conference on safety measures for blasting operations in coal mining.
Bezop. truda v proiz. 5 ne.1:34-35 Ja '61. (X A 10:2)
(Blasting---Safety measures--Complexes)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.P., inzh.; MOISEYEV, S.L., inzh.

Unified safety regulations for open-pit mining. Bezop. truda v
prom. 4 no. 5:37-38 My '60. (MIRA 14:5)
(Mining engineering---Safety measures)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.P., inzh.

Additional requirements of mining equipment. Bezop.truda v
prom. 3 no.4:10-11 Ap '59. (MIRA 12:6)
(Coal mines and mining--Equipment and supplies)

ZAYTSEV, A.P., red.; BORZOV, K.V., red.; BOGUSLAVSKIY, Yu.K., red.;
BELOUSOV, V.G., red.; VODAKHOV, L.A., red.; IZRAITEL', S.A., red.;
KOL', A.N., red.; LISTUK, S.S., red.; MOISHEYEV, S.L., red.;
MEL'NIKOV, N.V., red.; MOROZOV, V.P., red.; MUDROV, P.A., red.;
POLYAKOVA, Z.K., red.; PODERNI, Yu.S., red.; POLESIN, Ya.L., red.;
POKROVSKIY, L.A., red.; SLASTUNOV, V.G., red.; SKURAT, V.K., red.;
STRUNIN, M.A., red.; SOKOLOVSKIY, M.M., red.; FEOKTISTOV, A.T.,
red.; CHESNOKOV, M.M., red.; SHUKHOV, A.N., red.; YAMSHCHIKOV,
S.M., red.; BYKHOVSKAYA, S.N., red.izd-va; BERESLAVSKAYA, L.Sh.,
tekhn.red.

[Unified safety regulations in open-cut mining] Edinyye pravila
bezopasnosti pri razrabotke mestorozhdenii poleznykh iskopaemykh
otkrytym sposobom. Moakva, Gos.nauchno-tekhn.izd-vo lit-ry po
gornomu delu, 1960. 61 p. (MIRA 13:7)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennyi komitet po nadzoru
za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Strip mining--Safety measures)

ZAYTSEV, A.P.

ZAYTSEV, A.P.; KHEYFITS, S.Ya.

Influence of the speed of air flow on the dust content in mine
atmospheres. Ugol' 32 no.9:31-33 S '57. (MIRA 10:10)
(Mine ventilation)
(Mine dusts)

ZAYTSEV, Appolinariy Pavlovich

ZAYTSEV, Appolinariy Pavlovich, KHEYFITS, S.Ya., otvetstvennyy redaktor;
(RISHAYENKO, M.I., redaktor izdatel'stva.

[Problems of coal mine safety] Voprosy tekhniki bezopasnosti v
ugol'nykh shakhtakh. [Moskva] Ugletekhizdat, 1957. 62 p.

(MLRA 10:9)

(Coal mines and mining--Safety measures)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSOV, Appolinariy Pavlovich; KHEYFITS, Semen Yakovlevich; DMITRIYEV, L.N.,
redaktor izdaniel'stva; ALADOV, Ye.I., tekhnicheskiy redaktor.

[Safety regulations in foreign coal mines] Pravila bezopasnosti na
zarubezhnykh ugnolnykh shakhtakh. Moskva, Ugletekhizdat, 1956. 209 p.
(MLRA 10:4)

(Coal mines and mining--Safety measures)

ZAYTSEV, A.P.

KUZ'MICH, A.S., redaktor; BARABANOVA, F.A., redaktor; BOBROV, I.V., redaktor; VLADIMIRSKIY, V.V., redaktor; GRAFOV, L.Ye., redaktor; DOKUKIN, A.V., redaktor; YERASHKO, I.S., redaktor; ZABLUDSKIY, G.P., redaktor; ZAJEMIDKO, A.N., redaktor; ZAYTSEV, A.P., redaktor; ZASADYCH, B.I., redaktor; KAGAN, F.Ya., redaktor; KRASNIKOVSKIY, G.V., redaktor; KRIVONOGOV, K.K., redaktor; LALAYANTS, A.M., redaktor; MELAMED, Z.M., redaktor; MINDEL, E.O., redaktor; MOGILEVSKIY, N.M., redaktor; OSTROVSKIY, S.B., redaktor; POPOV, T.T., redaktor; SKOCHINSKIY, A.A., redaktor; SKURAT, V.K., redaktor; SOBOLEV, G.G., redaktor; STUGAREV, A.S., redaktor; SUMCHENKO, V.A., redaktor; TERPIGOROV, A.M., redaktor; SHEVYAKOV, L.D., redaktor; SHENKOV, A.A., redaktor; ANDREYEV, G.G., tekhnicheskiy redaktor

[Safety regulations in coal and shale mines] Pravila bezopasnosti v ugol'nykh i slantsevykh shakhtakh. Moskva, Ugletekhnizdat, 1953. 226 p.
(MIRA 8:4)

1. Russia (1923- U.S.S.R.) Ministerstvo ugol'noy promyshlennosti.
(Coal mines and mining--Safety measures)

2AYTSET AD

BABOKIN, I.A., redaktor; BALBACHAN, Ya.I., redaktor; BARABANOV, F.A., redaktor; BUCHNEV, V.K., redaktor; VLADIMIRSKIY, V.V., redaktor; GRIGOR'YEV, S. Ye., redaktor; DOKUKIN, A.V., redaktor; ZHABO, V.V. redaktor; ZADENIDKO, A.N., redaktor; ZAITSEV, A.P., redaktor; IL'ICHEV, A.S., redaktor; KAGAN, V.Ya., redaktor; KRASNIKOVSKIY, G.V., redaktor; KRASOZOV, I.P., redaktor; KRIVONOGOV, K.K., redaktor; LALAYANTS, A.M., redaktor; MOGILEVSKIY, N.M., redaktor; ONIKA, D.G., redaktor; OSTROVSKIY, S.B., redaktor; OSTROVSKIY, S.M., redaktor; PEYSAKHOVICH, G.I., redaktor; POCHENKOV, K.I., redaktor; SIRYACHENKO, F.N.; redaktor. SKOCHINSKIY, A.A., redaktor; STUGAREV, A.S., redaktor; SKORKIN, K.I.; SKURAT, V.K., redaktor; SOBOLEV, G.G., redaktor; TERPITOREV, A.M., redaktor; KHUDOCOVTSIEV, N.M.; redaktor; TSYPKIN, V.S., redaktor; SHEVYAKOV, L.D., redaktor; SHELKOV, A.A., redaktor; ANDREYEV, G.G., tekhnicheskiy redaktor.

[Safety rules in coal and shale mines] Pravila bezopasnosti v ugol'nykh i slantsevykh shakhtakh. Moskva, Ugletekhizdat, 1951. 207 p.
(MLRA 9:1)

1. Russia (1923- U.S.S.R) Ministerstva ugol'noy promyshlennosti.
(Coal mines and mining-Safety measures)

ZAYTSEV, Aleksandr Ivanovich, kand. tekhn. nauk, dozaent; ZAYTSEV,
Aleksandr Petrovich, aspirant

New networks of frequency dividers with variable coefficients.
Izv. vys. ucheb. zav.; elektromech. 7 no.2:239-242 '64.
(MIRA 17:4)

1. Zaveduyushchiy kafedroy elektrifikatsii promyshlennyykh predpriyatiy Tomskogo politekhnicheskogo instituta (for Zaytsev, Aleksandr Ivanovich).
2. Kafedra elektrifikatsii promyshlennyykh predpriyatiy Tomskogo politekhnicheskogo instituta (for Zaytsev, Aleksandr Petrovich).

FED'DSHTEYN, Ya.I.; ZAYTSEV, A.N.

Perturbed solar diurnal variations at high latitudes during
the IGY. Geomag. i aer. 5 no.3:477-486 My-Je '65.

(MIRA 18:5)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya
radiovoln AN SSSR.

FEL'DSHTEYN, Ya.I.; ZAYTSEV, A.N.

Current system of Sp-variations for the winter season during
the IGY. Geomag. i aer. 5 no.6:1123-1125 N-D '65.

(MIRA 19:1)

l. Institut zemnogo magnetizma, ionosfery i rasprostraneniya
radiovoln AN SSSR. Submitted April 30, 1965.

VLADIMIROV, B.D.; ZAYTSEV, A.N.; KARAVANSKAYA, N.A.; BOGOSLOVSKAYA,
M.D.

Hygienic principles for designing dining facilities in municipal
and boarding schools. Gig. i san. no. 10:37-42.0 '60.
(MIRA 13:12)

1, Iz Instituta pitaniya AMN SSSR.
(SCHOOL LUNCHROOMS, CAFETERIAS, ETC.)

KUZ'MIN, S.I., kand.tekhn.nauk; LEBEDYANSKAYA, N.D., kand.tekhn.nauk;
ZAYTSEV, A.N., inzh.

Explosive forming of sheet materials. Izv.vys.ucheb.zav.; mashinostr.
no.7:87-95 '60. (MIRA 13:11)

1. Khar'kovskiy aviatsionnyy institut.
(Sheet-metal work)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A. N.

"The Significance of the Active Acidity of the Medium for the Acetone-Ethyl Alcohol Fermentation," Mikrobiol; 8, No. 5, 1939.

Mbr., Inst. Microbiology, Dept. Biol. Sci., Acad. Sci., -1939-.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

Significance of the pH of the medium for acetone-ethyl alcohol fermentation. A. N. Zaitsev. *Mashchindruk* (U. S. S. R.) 8, 684-694 (in English, 5051 (1939)). The range for *B. acetoethylicus* is pH 4.6-9.8. Beyond these limits the bacteria are anaerobic and fermentation is stopped for 1-2 days. After that fermentation can be renewed by restoration of the optimal pH range (6.4-7.7). Addition of CaCO_3 (10% per wt. of potatoes or 35-45 g. per L) to the mash gives an optimal pH for the development of the bacteria but lowers the yield of neutral products. 1-2 g. of CaCO_3 per L. of mash enhances the yield of acetone and alcohol, and lowers acid production while fermentation proceeds easily. In neutral or weakly alk. media acid production is markedly increased. In acid media the ratio of formic acid to AcOH is raised. At pH 7-7.5 the acetone/tetra醇 ratio averages 4.06. At pH 6.3-6.6 this ratio is only 2.9 and at pH 6.6-6.1 it averages 2.43. F. Lazarus

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

100% BOMBEY
MILITARY ONE ONE 151

ZAYTSEV, A.N.

New methods of strength and compression testing of container paperboard.
Bum.prom. 38 no.2:22-23 F '63. (MIRA 16:2)

1. Nauchno-issledovatel'skaya laboratoriya tary.
(Paperboard--Testing)

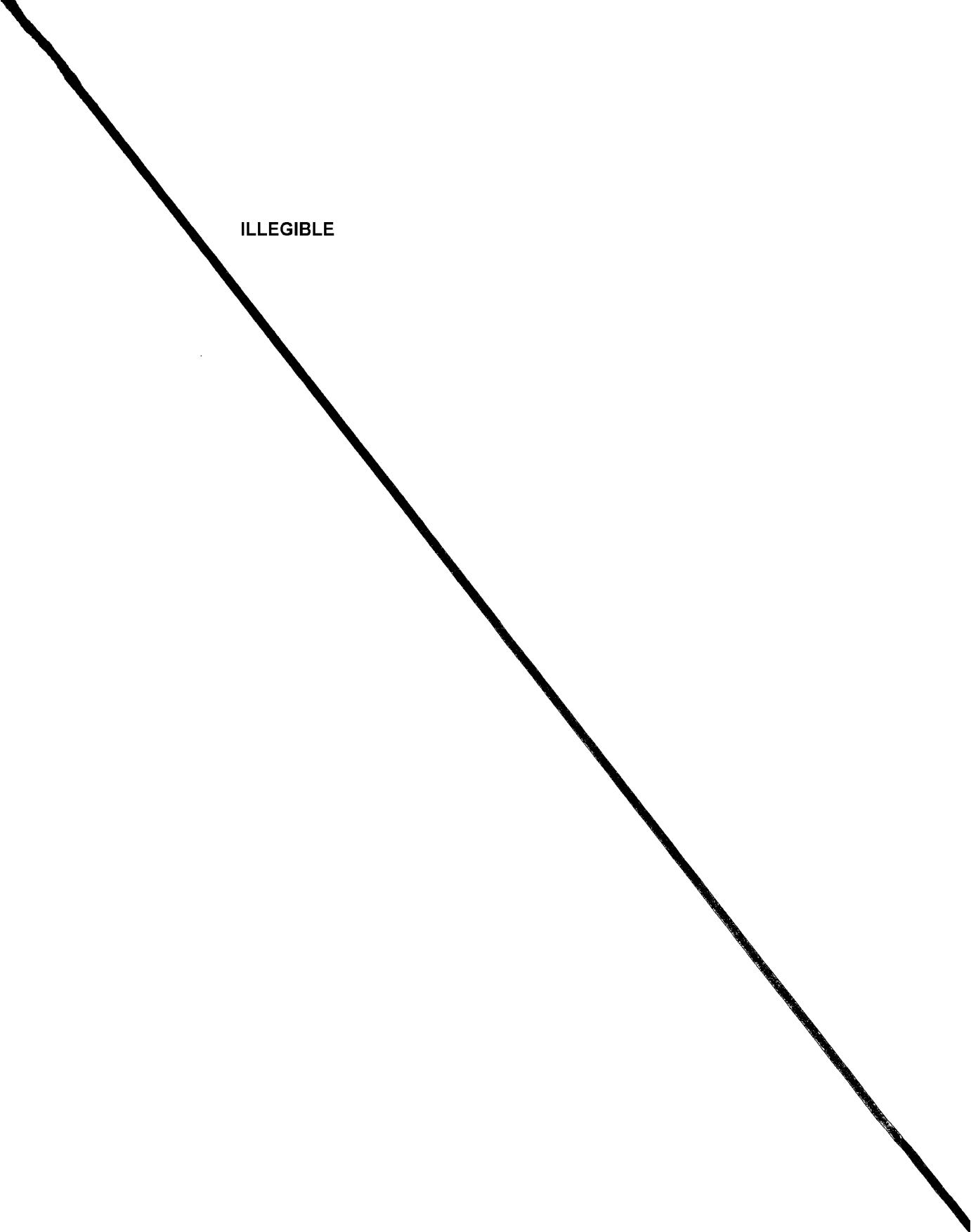
EXCERPTA MEDICA Sec 9 Vol 13/6 Surgery June 59

3256. SURGICAL TREATMENT OF CARDIOSPASM (Russian text) - Zaitsev
A. N. - VESTN. KHIR. 1958, 80/5 (39-43) Illus. 2

Three diaphragmocrurotomies with section of the vagus nerves, 10 transpleural oesophagogastrostomies and one transpleural cardiomyotomy were done for spasm of the cardia. The former interventions had poor postoperative and follow-up results. The postoperative outcome of cardiomyotomy was very good. A follow-up from 4 months to 3 yr. is available for 7 patients out of the 10 who underwent oesophagogastrostomy. Dysphagia was absent but a new complaint arose - a burning pain at the region of the sternal xiphoid process. After a time 4 patients developed an iron deficiency anaemia, the most probable cause of this complication being recurrent bleeding from peptic ulcers arising after operation at the site of anastomosis.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ILLEGIBLE



ZAYTSEV, A.N. (Kiyev); KHOKHULYA, B.V. (Kiyev); NIKITCHENKO, M.P. (Kiyev)

Advanced technology for the repair of freight cars. Zhel.-dor.transp.
45 no.12:69-73 D '63. (MIRA 17:2)

1. Nachal'nik Darnitskogo vagonoremontnogo zavoda (for Zaytsev). 2.
- Glavnnyy tekhnolog Darnitskogo vagonoremontnogo zavoda (for Khokhulya).
3. Nachal'nik planovogo otdela Darnitskogo vagonoremontnogo zavoda (for Nikitchenko).

USSR/Analysis of Inorganic Substances.

G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1962

frequency discharge from a VG-2 generator. The lines D_λ and H_λ are photographed on the spectrograph with a diffraction grating of 600 lines per mm. In case the H and D pressures are low, up to 50% of He is added to the gas mixture for the stability of the discharge. The concentration of H in the metal is determined by the equation: a (weight %) = (2VP_D / RTM). (C_H / C_D) . 100, where P is the initial pressure of D, V is the capacity of the vessel, M is the weight of the metal, T is the initial absolute temperature of the sample, C_H / C_D is the ratio of the concentrations of H and D in the equilibrium mixture. The method does not require a complete liberation of the gas to

ZAYTSEV, A. N.

USSR/Analysis of Inorganic Substances

G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19602

Author : A. N. Zaytsev, K. I. Petrov.

Inst : -

Title : Spectral Determination of Hydrogen in Zirconium by
the Method of Isotope Equilibrium.

Orig Pub: Zavod. Laboratoriya, 1956, 22, No 8, 923 - 926,

Abstract: A sample in the amount of 1 to 2 g is heated 15 min. at the temperature of 800° in deuterium atmosphere. The gaseous mixture of H and D obtained as a result of the achieved isotope equilibrium is analysed spectrally in respect to the isotope composition. The spectra are excited in a 3 mm capillary circulation quartz tube with a high

ZAYTSOV, A.N.

ZAYTSOV, A.N., gornyy inzh.

Efficient method of mining the Cheremkhovo deposits. Ugol' 32 no.10:
19-25 O '57. (MIRA 10:11)
(Kuznetsk Basin--Coal mines and mining)

ZAYTSEV, A.N. (Leningrad, ul. Nekrasova, d.21, kv.5)

Surgical treatment of cardiospasm [with summary in English].
Vest.khir. 80 no.5:39-43 My '58 (MIRA 11:7)

1. Iz khirurgicheskoy kliniki usovremenstvovaniya vrachey (nach. - prof. P.A. Kupriyanov) Vojenno-meditsinskoy ordena Lenina akademii S.M. Kirova).
(CARDIOSPASM, surgery,
(Rus))

ZAYTSEV, A.N.

Manganese content of vegetables and its preservation at various stages
of cooking [with summary in English]. Vop. pit. 16 no.6:61-65 N-D '57.
(MIRA 11:3)

1. Iz kafedry gigiyeny pitaniya (zav. - prof. A.A.Khrustalev)
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(VEGETABLES,

manganese content, in various stages of cooking (Rus))
(MANGANESE, determinat on,
in vegetables, in various stages in cooking (Rus))

ZAYTSEV, A. N.: Master Med Sci (diss) -- "The effect of culinary treatment on the content and retention of manganese in fruits, from the standpoint of constructing a rational diet". Moscow, 1959. 14 pp (First Moscow Order of Lenin Med Inst im I. M. Sechenov), 200 copies (KL, No 12, 1959, 102)

ZAYTSEV, A.N.

Studies on the manganese taken in by rats in various compounds. Vop.
pit. 18 no.3:77-79 My-Je '59. (MIREA 12:7)

1. Iz kafedry gigiyeny pitaniya (zav. - prof. A.A. Khrustalev) I
Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(MANGANESE, metab.
balance after intake of various cpds. in rats (Rus))

ZAYTSEV, A.N.

Increasing production without the expansion of existing facilities.
Zhel.-dor.transp. 41 no.9:40-45 S '59. (MIRA 13:2)

1. Nachal'nik Darnitskogo wagonoremontnogo zavoda.
(Kiev--Railroads--Repair shops)

ZAYTSOV, Aleksandr Nikoleyevich [Zaitsev, O.]; MENGDA, Karp Yevtikhievich [Meheda, K.]; NEVSTHUYEV, Leonid Danilovich; DYACHKO, I.P., red.; YEDEL'MAN, N.L., tekhn.red.

[Toward our program for 1965] Na rubezhi 1965. Kyiv, Kyiv's'ke obl.knyzhkovo-gazetne vyd-vo, 1960. 16 p.

(MIRA 14:1)

(Kiev--Railroads--Cars)

ACC NR: AP7013723

is 40,000 a. The maximum intensity of the nighttime vortex is observed in the early morning hours -- the polar electrojet. On the daytime side of the earth at latitudes 60-70° the intensity of magnetic disturbances is insignificant; at these latitudes there are extremely insignificant currents. In the evening hours at $\Phi' \sim 65^\circ$ the positive changes of the H component are determined by the appearance of the relatively weaker evening electrojet which is closed completely through the middle latitudes. This causes negative baylike disturbances in the evening hours in the middle latitudes. Part of the current from the nighttime electrojet also is closed through the middle latitudes, leading to the appearance of positive baylike disturbances in the morning and nighttime hours. The result of the current system shown in the diagram is appearance of electrical fields in the ionosphere directed equatorward along the oval zone and poleward in the evening hours at $\Phi' \sim 65^\circ$. These electrical fields can appear as a result of the separate penetration of protons and electrons into the ionosphere. Orig. art. has: 1 figure. [JPRS: 34,593]

Card 2/2

ACC NR: AP7013723

SOURCE CODE: UR/0203/65/005/006/1123/1125

AUTHOR: Fel'dshteyn, Ya. I.; Zaytsev, A. N.

ORG: Institute of Terrestrial Magnetism, the Ionosphere and Radio Wave Propagation, AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR)

TITLE: Current system of S_p variations in the high latitudes for the winter season in the IGY Period

SOURCE: Geomagnetism i aeronomiya, v. 5, no. 6, 1965, 1123-1125

TOPIC TAGS: geomagnetic latitude, earth current, electric field, ionosphere, geomagnetism

SUB CODE: 08

ABSTRACT: The authors present a diagram of the current system of S_p variations for the winter season of the IGY; it takes into account the separation of the nighttime and evening vortices. The coordinate system is corrected geomagnetic latitude and the time of the eccentric dipole. Intensity of currents in the earth is taken into account. Between the current lines there is a current of 1000 a. The intensity of the nighttime current vortex is 180,000 a; the intensity of the evening current

Card 1/2

UDC: 550.385

0933 2199

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ZATTSEV, A.N., kand.med.nauk

Reconstituted milk. Zdorov'e 8 no. 3:31 Mr '62. (MIA 15:4)
(MILK, REMADE)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

VASIL'YEV, B. K.; ZAYTSEV, A. N.; PIS'MENNYY, V. S.

Boxes of crimped cardboard. Standartizatsiya 26 no. 10:54-59
(MIRA 15:10)

(Boxes—Standards)

KOROSTASHEVSKIY, Rafail Vladimirovich; ZAYTSEV, Aleksey Matveyevich;
LEYKAND, M.A., inzh., retsenzent; KARNAUKHOV, G.F., inzh.,
retsenzent; GRIGORASH, K.I., red.; NOVIK, A.Ya., tekhn.red.

[Antifriction bearings used in airplane construction] Avia-
tsionnye podshipniki kacheniiia. Moskva, Oborongiz, 1963.
339 p. (MIRA 16:11)

(Bearings (Machinery))
(Airplanes--Design and construction)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.M. (Moskva)

Demonstration of thermoelectric cooling. Fiz. v shkole 20 no.2:76
Mr-Ap '60. (MIRA 14:5)
(Thermoelectric apparatus and appliances)

25637

S/032/61/027/007/008/012
B110/B203

Structural properties of fatigue ...

formation of cracks, (14) periodic stress and temperature changes, (15)
periodic stress change until formation of cracks.

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S/032/61/027/007/008/012
B110/B203

Structural properties of fatigue ...

cylindrical samples, blade- and disk tests were observed on the test plant and in turbine operation. Under complicated operational conditions, the zone arrangements in the fracture are different. Only at 500-550°C for EI 437 B and 700-800°C for cast alloy, and under high vibrational loads, the destruction behaves like a fatigue failure. The destruction of scarf joint parts and projections between the scarf joints is of fatigue character; continuous lines pass through the entire section, and the fold relief is oriented. Since, besides high temperature and static load, also the effect of the macroscopic concentrator (longitudinal groove) is noticeable, there are more centers than in the fracture of smooth profile parts. [Abstracter's note: seven photographs, not reproducible.] There are 7 figures, 1 table, and 2 Soviet-bloc references.

Table. Test conditions of blades.

Legend: (1) Blade material, (2) test temperature, °C, (3) amplitude value of stresses, kg/mm², (4) number of cycles before start of destruction, (5) note, (6) EI 437 B, (7) cast alloy, (8) ditto, (9) with single loading until complete destruction, (10) with periodic amplitude changes of stresses, (11) with 12-fold heat change, (12) with 4-fold heat change, (13) until

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Structural properties of fatigue ...

S/032/61/027/007/008/012
B110/B203

(3) formation of several cracks. Hyperbolic lines in the center of fatigue destruction of cast steel indicate: (1) the formation of many local focuses, and (2) the confluence of primary cracks into one destruction surface. Distinct fatigue lines proceeding through the entire destroyed section are not discernible; wavelike lines beginning and ending at the boundaries of a grain are sometimes observed. The gradualness of destruction development can be observed on annular stripes of differently colored oxide films which may, however, be missing at low temperatures, high stresses, and quick destruction propagation. Typical fatigue lines usually appear in the form of rings at low temperatures and under high vibrational stresses. Characteristic are the displacement microsurfaces forming jointly the fold relief on the surface of destroyed grains. These facets differently oriented in space are the destruction surfaces of one or more adjacent grains of equal orientation. Here, a smooth part and a fold-relief part proceeding therefrom are discernible. On one facet, the folds are equally oriented: fan-shaped or nearly parallel. The fold surface of the elementary facets is probably formed due to destruction along adjacent shear planes and confluence of these destructions. The shape of a fan is probably due to rotation of the crystal regions round an axis. The mentioned characteristics in

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S/032/61/027/007/008/012
B110/B203

Structural properties of fatigue ...

mechanism). They were heated with a benzene - air mixture, and their temperature was measured with an optical pyrometer. An investigation of blades made of 9Ni 437B (EI 437 B) alloy and cast alloy (Table) showed the following: In their fractures, focus and center are less distinct than in structural steels since there are many focuses in fatigue failures under simultaneous action of variable stresses and high temperatures (e.g., on gas turbine parts). The fracture focus has a facet with smoother surface than the other facets in the zone of fatigue propagation of the crack, and is not, as in structural steels, perpendicular to the direction of most extended stresses. It is often small, and little different from the rest of the fatigue zone. Here, the start of destruction is determined from the orientation of the ribs formed by the confluence of surface destructions. The latter begin in different, adjacent focuses. The fold relief is also oriented toward the start of destructions. With increasing destruction propagation in the depth, the height of ribs decreases. Since the first cracks are often far apart, especially the ribs distant from the destruction center do not flow together. The following characteristics were established: (1) Simultaneous formation of several focuses; (2) development of destruction on some gliding surfaces in the crystallite;

Card 2/6

25637

S/032/61/027/007/008/012
B110/B203

15 261D.

AUTHORS: Gordeyeva, T. A., Volodina, T. A., and Zaytsev, A. M.

TITLE: Structural properties of fatigue failures of samples and machine parts made of refractory alloys

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 7, 1961, 894-899

TEXT: The origin of fractures (by fatigue, brittleness) must often be judged from their appearance. The fractures of refractory Ni - Cr alloys (of the deformable types 3Н437 (EI 437) and 3Н 617 (EI 617), as well as of cast alloys) do not show the typical fatigue phenomena of fractures of structural steels. Since the fatigue failures of refractory alloys show some common features with fractures of aluminum and magnesium alloys, their structural peculiarities are due to working conditions and material structure. Some fractures of gas turbine blades and disks were examined visually and fractographically on a special apparatus in the area of least spring tension. Two notches were applied in such a way that the remaining neck was 15 mm. The blades were loaded statically or periodically (eccentric

Card 1/6

GORDEYEVA, T.A.; VOLODINA, T.A.; ZAYTSEV, A.M.

Particular characters of the structure of the fatigue
fractures of specimens and elements of heat resistant
alloys. Zav.lab. 27 no.7:894-899 '61. (MIRA 14:7)
(Metals--Fatigue) (Heat resistant alloys)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

BEKIROV, A. Ya.; ZAYTSEV, A.M.

Dividing device equipped with balls. Stan.i instr. 32 no.7:36 J1 '61.
(MIRA 14:6)
(Dividing engine)

Cyclic Metal Strength (Cont.)

SOV/6025

Zaytsev, G. Z. Accumulation of Plastic Strain Under Cyclic Loading

61

Grigorovich, V. K. Fatigue Fracture in Relation to the Fibre Orientation in Steel Parts

73

Zaytsev, A. M. Investigation of Laws Governing the Formation of Fatigue Fractures

82

Kobrin, M. M., and P. I. Sokolovskiy. Special Features of Steel Fracture Under Cyclic Loads in Relation to Anisotropy of Its Structure

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FATIGUE TEST METHODS

Ivanova, V. S. and S. Ye Gurevich. Experimental Verification of the Accelerated Method for Determining Fatigue Strength

110

Elyasheva, M. A. Investigating the Possibility of Applying the Accelerated Method for Determining the Fatigue Strength
Card 4/9

Cyclic Metal Strength (Cont.)

SOV/6025

and growth of fatigue cracks, the role of plastic deformation in fatigue fracture, an accelerated method of determining fatigue strength, the plotting of fatigue diagrams, and various fatigue test methods. New data are presented on the sensitivity of high-strength steel to stress concentration, the effect of stress concentration on the criterion of fatigue failure, the effect of the size factor on the strength of metal under cyclic loads, and results of endurance tests of various machine parts. Problems connected with cyclic metal toughness, internal friction, and the effect of corrosion media and temperature on the fatigue strength of metals are also discussed. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

NATURE OF FATIGUE FRACTURE

- Oding, I. A. Diffusionless Mechanism of Formation and Growth of a Fatigue Crack
Card 2/2

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ZAYTSEV, A.M.

7/27
43

PART I CYCLIC FATIGUE TESTS 207/5025

Soveshchaniye po ustalosti metallov. 2nd., Moscow, 1950.

Teiklicheskaya prechist' metallov; materialy vtorogo soveshchaniya po ustalosti metallov, 24 - 27 maya 1950 r. (Cyclic Metal Strength; Materials of the Second Conference on the Fatigue of Metals, held May 24 - 27, 1950) Moscow, Izd-vo Akad. Nauk, 1952. 338 p. Errata slip inserted. 2500 copies printed.

Resp. Ed.: I. A. Odintsov, Corresponding Member of the Academy of Sciences of the USSR; Ed. of Publishing House: A. M. Chernov; Tech. Ed.: A. P. Guseva.

PURPOSE: This collection of articles is intended for scientific research workers and metallurgists.

COVERAGE: The collection contains papers presented and discussed at the second conference on fatigue of metals, which was held at the Institute of Metallurgy in May 1950. These papers deal with the nature of fatigue fracture, the mechanism of formation

Card 1/4

3/13/62/000/012/027/035
A006/A101

Investigating the regularities in the...

tion of the fracture development by bending, i.e. when the initial and subsequent crack join not in a line but in a point. At a sharp increase in the over-load, changes occur in the curvature radius of fatigue cracks of the boundary type of different roughness zones, and in some cases secondary steps and notches are formed along the crack edge. The formation of fatigue lines is not connected with interruptions in the operation of the specimen or the part, neither with the operation of parts at low stresses when the propagation of the crack is interrupted; the presence of any fatigue lines in the fractures of parts proves only that changes in the loading conditions occurred during the operation of cracked parts.

[Abstracter's note: Complete translation]

A. Nikonov

Card 2/2

S/137/62/00/014/027/032
A006/A101

AUTHOR: Zaytsev, A. M.
TITLE: Investigating the regularities in the formation of fatigue fractures

PERTIODICAL: Referativnyy zhurnal, Metalurgiya, no. 12, 1962, 48, abstract
121285 (In collection: "Tsiklich. prochnost' metallov", Moscow,
AN SSSR, 1962, 82 - 93)

TEXT: On the basis of experimental investigations of the causes for the formation of fatigue lines and other structural symptoms, it is demonstrated on fatigue fractures of machine parts, that fatigue lines observed on the fractures of parts, can be divided into 2 groups: fatigue lines of the type of boundaries in zones of different roughness; these lines are formed at sharp changes in the velocity of crack propagation as a result of abrupt variations of the overloading magnitude; stepped type fatigue lines, formed in case of changes in the mutual orientation of maximum tensile stresses. Affiliated cracks with secondary steps and notches, observed on the fractures, are formed at a changing orienta-

Card 1/2

ZAYTSEV, A.M.

Small-size quick-response platinum resistance thermometer.
Frib. i tekhn. eksp. 9 no.1;228-229 Ja-F '64. (MRA 17:4)

1. Institut obshchey i neorganicheskoy khimii AN SSSR.

AM1016112

BOOK EXPLOITATION

S/

Korostashevskiy, Rafail Vladimirovich; Zaytsev, Aleksey Matveyevich

Aircraft antifriction bearings (aviatsionnye podshipniki kacheniya), Moscow,
Oborongiz, 1963, 339 p., illus., bibli., 4,800 copies printed.

TOPIC TAGS: antifriction bearing, jet engine, piston engine, lubrication, cooling, lubricant TsLATIM-221, lubricant VNIINP-222, bronze alloy BrZhMts10-3-1.5, kerosene T-1, kerosene TS-1, kerosene T-2, nickel alloy EI 974, bronze alloy BrZhN10-4-4

PURPOSE AND COVERAGE: This book gives the experience in the design and use of antifriction bearings used in aircraft. The design and basic characteristics of bearings, ways of lubricating and cooling them, and the various factors affecting the operation of bearings are considered. The design of certain assemblies with bearings is treated. Methods of calculating bearings are given; the recommended methods of studying their typical defects and break downs and evaluating their condition during repairs are described. The book gives the required handbook information and various instructional materials on bearings. The book is intended for engineers-designers; it also will be of value to engineers and mechanics who service and repair machines.

Cord ~~25~~

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SOV/3740

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The Structure (Cont.)

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by detailed instructions for verification. No personalities are mentioned. There are no references.

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PHASE I BOOK EXPLOITATION SOV/3740

Fridman, Ya. B., T.A. Gordeyeva, and A.M. Zaytsev

Stroyeniye i analiz izlomov metallov (The Structure and Analysis of Metal Fractures), Moscow, Mashgiz, 1960. 127 p. 4,500 copies printed.

Reviewer: A.A. Gol'denberg, Candidate of Technical Sciences; Ed.: L.M. Shkol'nik, Candidate of Technical Sciences; Tech. Eds.: R. Dobritsina and A.F. Uvarova; Managing Ed. for Literature on Metal Working and Machine-Tool Manufacture (Mashgiz): V.V. Rzhavinskiy.

PURPOSE: This book is intended for technologists, physical metallurgists, and designers engaged in the design, manufacture, and operation of various types of machinery.

COVERAGE: The book presents the principles of the modern theory of failure together with such analysis of the structure of fractures as is necessary for a correct understanding of failures resulting from the application of ordinary short-time, long-time, static, and fatigue loads. The numerous examples of such analyses, taken from various branches of machinery manufacturing, are accompanied
Card 1/5

28 (5)

AUTHORS:

Ovsyannikov, B. M., Stolyarov, V. A., SOV/32-25-8-32/44
Timoshuk, L. T.

TITLE:

On the Influence of Geometrical Parameters of Conical Diamond-tips on the Measuring Results of the Hardness of Metal

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 996-998 (USSR)

ABSTRACT:

The theoretically and experimentally conducted investigations (Refs 2-5) unequivocally point to the influence mentioned in the title on the metal-hardness tests according to Rockwell (MHR). As up to the present there has not been found a functional correlation between the parameters of a standardized test and the constants characteristic of the material, the theoretical explanations are based on various assumptions. Some explanations of this kind are mentioned as G. P. Zaytsev (Ref 2) and (Ref 3) with the corresponding data (Table 1) and explanations of the Vsesoyuznyy institut metrologii im. Mendeleyeva (All-Union Institute of Metrology imeni Mendeleyev) and the NIIVESPROM. The last-mentioned institute investigated the influence of the curvature radius (R) of the conical diamond tips (DT) on the (MHR). The obtained diagrams (Fig 1) show that a continuous increase of the Rockwell hardness rating can be observed with the

Cause for the Formation of Fatigue Lines on Fracture Surfaces SOV/32-25-8-31/44

ponding to the switching on of the machine) (FC) develop at the zone boundaries of various unevennesses (Fig 2). Therefore the development of such (FC) on (F) can be caused by brief cyclic excess strain as was concluded in references 5 - 7. The (FC) observed in (F) of machine components can be divided into two main groups (Fig 4), i.e. 1) (FC) at the zone boundary and of different unevennesses which occur at a sudden change of the spreading velocity of the (FC) (operation with sudden change in excess strain), and 2) the staggered (FC) which are caused by the mutual orientation of the highest degree tension-expansion and cracks. Therefore one can conclude from the type of (FC) the kind of strain. There are 4 figures and 9 references, 6 of which are Soviet.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut grazhdanskogo vozdushnogo flota (State Scientific Research Institute of Civilian Aviation)

Card 2/2

28 (5)
AUTHORS:

Fridman, Ya. B., Zaytsev, A. M.

SOV/32-25-8-31/44

TITLE:

Cause for the Formation of Fatigue Lines on Fracture Surfaces

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 8, pp 992-995 (USSR)

ABSTRACT:

The surfaces of fatigue fractures (FF) often show fatigue cracks (FC) which proceed in a staggered wave shape radially from the center of the fracture (F). The causes of the origin of these (FC) are explained in different ways (Refs 1 - 8). Special mention is made of R. S. Nikolayev (Ref 8) and Thum (Ref 1). The present paper tries to explain this question, and the origin of other characteristics of (F) and recommends some methods for the analysis of (FC). The authors tested flat samples (4×24 mm) of 40KhNMA and 30KhGSA steels, aluminum, copper, larger-sized samples of flat, disk or T-shaped steel 40KhNMA, 38KhMYuA and steel 20. The tests were carried out in three groups which differ in the way of the developing tensions in the samples. The (F) were investigated with a binocular microscope, while the (FC) were investigated on samples not yet fractured. The experiment results proved that no (FC) develop when the samples rested or in case of a "temporary work" (decreased tension) (Fig 1). During work of the sample or in case of a brief excess strain (corres-

Card 1/2

AUTHOR: Zaytsev, A.M. (Moscow) 47-56-2-18/3C

TITLE: Two New Applications of a Spinthariscope (Dva novykh primene-niya spintariskopa)

PERIODICAL: Fizika v Shkole, 1958, Nr 2, pp 71-75 (USSR)

ABSTRACT: The author explains how to evaluate the activity of any radioactive substance and its degree of radiation with a spinthariscope. The activity can be evaluated by counting the scintillations. This method was used by Rutherford for the study of the atom. The radiation can be calculated observing the degree of ionization of the air in the spinthariscope.

AVAILABLE: Library of Congress

Card 1/1 1. Spinthariscopes-Applications 2. Radioactive substances-Analysis

ZAYTSEV, A.M.

~~Analysis of fatigue fractures. Zav.lab.22 no.4:472-478 '56.~~
~~(MLRA 9:7)~~

1. Naukno-issledovatel'skiy institut grazhdanskogo vozdukhonegofleta.
(Metals--Fatigue)

ZAYTSEV, A.M.

USSR/Miscellaneous

Card 1/1 : Pub. 12- 4/15

Author(s) : Zaytsev, A. M.

Title : About technical characteristics of automobiles

Periodical : Avt. trakt. prom. 2, Inside back page, Feb 1954

Abstract : The technical characteristics of Soviet-built automobiles Moskvich, GAZ M-1, Tofesta, ZIM, ZIS, Iaz, are listed.

Institution : ****

Submitted : ****

CP RIVETED

The influence of the carbon, of charcoal and of coke on
the progress of the direct reduction of iron oxides. A. M.
Savchenko, Met. 1937, No. 7, p.17; Chem. Zentralbl.
Bd. II, 1471. The direct reduction of Fe oxide by
charcoal begins at 750° but first becomes intense at 900°.
Direct reduction by coke begins at 900° and first becomes
appreciable at 1100°. At higher temps. (1100-1200°)
the velocity of the direct reduction by charcoal is somewhat
reduced. The total reduction of the sample when heated
in a current of CO in the presence of charcoal amounts to
about 100% for limonite and about 77% for magnetite.
In the presence of coke and under the same conditions these
values are 75 and 47%, resp. M. G. Moore

AMSLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A.L., inzh. (g.Kurgan)

Resistance welding of pipelines in the wintertime. Stroi. pred.
neft. prom. 3 no.2:19-21 F '58.
(MIRA 11:4)
(Pipelines--Welding)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001964100034-6

ZAYTSEV, A. L., inzh.; STEPANOV, V. M., inzh.

Take local conditions into consideration. Stroi. truboprov. 5
no. 9:16-17 S '60. (MIRA 13:9)
(Siberia--Pipelines--Welding)

ZAYTSEV, A.K., ctv. red.; GRINER, N.S., red.izd-va; SABITOV, A.,
tekhn. red.

[Handbook on technical standardization of underground
construction and installation work for CTC and com-
munication in mines] Spravochnik po tekhnicheskому nor-
mirovaniyu podzemnykh stroitel'no-montazhnykh rabot po
STsB i sviazi v gornorudnykh shakhtakh. Moskva, Gosgor-
tekhizdat, 1963. 275 p. (MIRA 16:8)

1. Krivoy Rog. Gornorudnyy institut.
(Krivoy Rog Basin—Mine communications)
(Mine railroads—Signaling—Centralized traffic control)

ZAYTSEV, ALEKSANDR KONSTANTINOVICH

Osnovy ucheniiia o trenii, iznose i smazke mashin. Moskva, Mashgiz, 1947-48,
4 v. diagrs.

Bibliography: v. 1, p. 245-252.

Contents. - ch. 1. Trenie v mashinakh. 256 p. ch. 2. Iznos materialov.
220 p. ch. 3 Iznos mashin i detalei i sposoby bor'by s ikh iznosom. 164 p.
ch. 4. Smazka mashin. 279 p.

Fundamentals of friction, wear and lubrication of machines. v. 1. Friction
in machines. v. 2. Wear of materials. v. 3. Wear of machines and
machine parts and measures for its prevention. v. 4. Lubrication of machines.

Cty

DLC: TJ1075.Z3

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library
of Congress, 1953.

M.A. ZAYTSEV, A.K.

2. Prop. of alloy

[Handwritten note: "Experiments on the Wear and Friction of Babbitts. M. M. Kurnikov, N. V. Zaytsev (Ural. Metallozavod. Mtd. Ind. Herald), 1959, 10, no. 1, p. 23-26. (In Russian) K. describes wear and friction tests carried out on a high-zinc Babbitt, an arsenic-cadmium Babbitt, a lead-base alloy, and a lead-bronze in contact with a steel journal under various pressures. The relation between wear and surface finish is discussed. It is stated that the laboratory tests do not provide a satisfactory basis for estimating the behavior of bearing materials in service. A comment on K's work - N.B.V.]

1983